03-15-03

LUD 5298.4 DIV (10105901)

1300 Sed



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Name of Depositor:

Fani Malikouzakis

Signature of Depositor

Fani Malekoujali

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s)

Kohei MIYAZONO et al.

Serial Number

09/903,068

Filing Date

July 11, 2001

For

ANTIBODIES WHICH BIND SPECIFICALLY TO

ACTIVIN RECEPTOR LIKE KINASES

Art Unit

1647

Examiner

Robert S. Landsman

Confirmation No.

1081

Commissioner of Patents P.O. Box 1450

Alexandria, VA 22313-1450

LETTER RE SEQUENCES

SIR:

Responsive to the Notice dated March 2, 2005, please amend this application as follows:

IN THE SEQUENCES

Replace the current paper and diskette copes of the sequence listing by the attached.

The undersigned hereby declares that, to the best of his knowledge the attached paper copy of sequence information and computer readable form thereof present information are identical to each other and to information in the application as filed. No new matter is believed presented.

25402763.1

REMARKS

These amendments are believed to address the Examiner's latest issues.

Respectfully submitted,

FULBRIGHT & JAWORSKI, L.L.P.

Norman D. Hanson, Esq.

Registration No. 30,946

666 Fifth Avenue

New York, New York 10103-3198

(212) 318-3000 (212) 318-3400 (fax)



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/903,068	07/11/2001	Kohei Miyazono	LUD-5298.4 DIV	1081	
24972	7590 03/02/2005	•	EXAMINER		
FULBRIGHT & JAWORSKI, LLP			LANDSMAN, ROBERT S		
666 FIFTH A	VE .		ART UNIT	PAPER NUMBER	
NEW YORK,	NY 10103-3198		1647		
	•		DATE MAIL ED. 02/02/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

FULBRIGHT & JAWORSKI, LLP

NEW YORK DOCKETING

Docketed D Not Required D

Previously D Updated D

Docket No: UU - UIS 5298-US4-NIV

Action: 2-28-05

Date: Due/Done 4-2-05

Initials: A



UNITED STATES DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

	G TRAUCE					
APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR I PATENT IN REEXAMINATION			ATTORNEY DOCKET NO.	
09 903068	7/11/01	Miyazono	et.al.	LUD - 5298.4 DIV		
		•			EXAMINER	
	,			Landsman		
				ART UNIT	PAPER	
				1647	030105	

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

The Paper Copy of the Sequence Listing has 48 sequences and the Electronic Copy only has 34. The disk containing the CRF which was submitted in April 2004 contained errors. See the attached "Raw Sequence Listing Error Report." Please submit a new disk.

This application contains sequence disclosures that are encompassed by the definitions for nucleotide and/or amino acid sequences set forth in 37 CFR 1.821(a)(1) and (a)(2). However, this application fails to comply with the requirements of 37 CFR 1.821 through 1.825 for the reason(s) set forth on the attached Notice to Comply With Requirements For Patent Applications Containing Nucleotide Sequence And/Or Amino Acid Sequence Disclosures.

Applicant is given ONE MONTH, or THIRTY DAYS, whichever is longer, from the mailing date of this letter within which to comply with the sequence rules, 37 CFR 1.821 – 1.825. Failure to comply with these requirements will result in ABANDONMENT of the application under 37 CFR 1.821(g). Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a). In no case may an applicant extend the period for reply beyond the SIX MONTH statutory period. Direct the reply to the undersigned. Applicant is requested to return a copy of the attached CRF Diskette Problem Report with the reply.

Advisory information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Landsman whose telephone number is (571) 272-0888. The examiner can normally be reached on M-Th 9 AM-6 PM (eastern); alt F 9 AM-6 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brenda Brumback can be reached on 571-272-0961. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert Landsman Primary Examiner Art Unit: 1647

OBERT S. LANDSMAN, PH



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number:

Source:

Date Processed by STIC:

ed by STIC: FINA

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,

2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 703-308-4212; FAX: 703-308-4221

<u>Effective 12/13/03</u>: TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORFO SEQUENCE LISTINGS, PLEASE USE THE <u>CHECKER VERSION 4.1 PROGRAM</u>, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

http://www.uspto.gov/web/offices/pac/checker/chkr41note.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail. Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom. Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

- 1. EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>, EFS Submission User Manual ePAVE)
- 2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
- 3. Hand Carry directly to (EFFECTIVE 12/0 N03):
 U.S. Patent and Trademark Office, Box Sequence, Customer Window, Lobby, Room 1B03, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202
- Federal Express, United Parcel Service, or other delivery service to: U.S. Patent and Trademark Office, Box Sequence, Room 4B03-Mailroom, Crystal Plaza Two, 2011 South Clark Place, Arlington, VA 22202

Revised 10/08/03



IFW16

RAW SEQUENCE LISTING

DATE: 04/12/2004

PATENT APPLICATION: US/09/903.068B

TIME: 12:58:00

Input Set : A:\pto.ln.txt

Output Set: N:\CRF4\04122004\1903068B.raw

SEQUENCE LISTING

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3 (1) GENERAL INFORMATION:
      4
             (i) APPLICANT: MIYAZONO, Kohei
      5
                            TEN DIJKE, Peter
                            FRANZEN, Petra
      7
                            YAMASHITA, Hidetoshi
      8
                            HELDIN, Carl-Henrik
            (ii) TITLE OF INVENTION: ACTIVIN RECEPTOR LIKE KINASES, PROTEINS
     1.0
     11
                                     HAVING SERINE THREONINE KINASE DOMAINS,
     12
                                     AND THEIR USE
           (iii) NUMBER OF SEQUENCES: 48
     14
     16
            (iv) CORRESPONDENCE ADDRESS:
     17
                  (A) ADDRESSEE: Fulbright & Jaworski L.L.P.
     18
                  (B) STREET: 666 Fifth Avenue
     19
                  (C) CITY: New York City
     20
                  (D) STATE: New York
                                                              Opes Not Comply
     21
                  (E) COUNTRY: USA
     22
                  (F) ZIP: 10103
                                                               Corrected Diskette Needed
     24
             (v) COMPUTER READABLE FORM:
     25
                  (A) MEDIUM TYPE: Diskette, 3.25 inch, 1.44mb
                  (B) COMPUTER: IBM PS/2
     27
                  (C) OPERATING SYSTEM: PC-DOS
                  (D) SOFTWARE: Wordperfect
     30
        (vi) CURRENT APPLICATION DATA:
C--> 35
                  (A) APPLICATION NUMBER: US/09/903,068B
C--> 36
                  (B) FILING DATE: 11-Jul-2001
     66
           (vii) PRIOR APPLICATION DATA:
     39
                  (A) APPLICATION NUMBER: PCT/GB93/02367
     40
                  (B) FILING DATE: November 17, 1993
    43
                  (A) APPLICATION NUMBER: GB 9224057.1
    44
                  (B) FILING DATE: November 17, 1992
    47
                 (A) APPLICATION NUMBER: GB 9304677.9
    48
                 (B) FILING DATE: March 8, 1993
    51
                 (A) APPLICATION NUMBER: GB 9304680.3
    52
                 (B) FILING DATE: March 8, 1993
                 (A) APPLICATION NUMBER: 9311047.6
    56
                 (B) FILING DATE: May 28, 1993
    59
                 (A) APPLICATION NUMBER: 9313763.6
    60
                 (B) FILING DATE: July 2, 1993
    63
                 (A) APPLICATION NUMBER: 9316099.2
    64
                 (B) FILING DATE: August 3, 1993
    67
                 (A) APPLICATION NUMBER: 321344.5
    68
                 (B) FILING DATE: October 15, 1993
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RAW SEQUENCE LISTING
                                                  DATE: 04/12/2004
          PATENT APPLICATION: US/09/903,068B
                                                   TIME: 12:58:00
          Input Set : A:\pto.ln.txt
          Output Set: N:\CRF4\04122004\1903068B.raw
(viii) ATTORNEY/AGENT INFORMATION:
```

70 71 (A) NAME: Norman D. Hanson 72 (B) REGISTRATION NUMBER: 30,946 73 (C) REFERENCE/DOCKET NUMBER: LUD 5298.4 DIV (10105901) 75 (ix) TELECOMMUNICATION INFORMATION: 76 (A) TELEPHONE: (212) 318-3000 77 (B) TELEFAX: (212) 318-3400

ERRORED SEQUENCES

```
ID NO: 34:

LEQUENCE CHARACTERISTICS:

(A) LENGTH: (178) amino acids

(B) TYPE: 130 amino acid

(D) TOPOLOGY: linear OLECULE Total
      2295 (2) INFORMATION FOR SEQ ID NO: 34:
      2296
                 (i) SEQUENCE CHARACTERISTICS:
      2297
      2298
      2299
      2300
               (ii) MOLECULE TYPE: peptide
              (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 34
      2302 Thr Arg Leu His Leu Cys His Cys Ser Arg Glu Val Gly Cys Asn Ala
                                                   10
      2304 Arg Thr Thr Gly Trp Val Pro Gly Ile Glu Phe Leu Asn Glu Thr Asp
      2305
     2306 Arg Ser Phe Tyr Glu Asn Thr Cys Tyr Thr Asp Gly Ser Cys Tyr Gln
      2308 Ser Ala Arg Pro Ser Pro Glu Ile Ser His Phe Gly Cys Met Asp Glu
                                     55
     2310 Lys Ser Val Thr Asp Glu Thr Glu Phe His Asp Thr Ala Ala Lys Val
     2311 65
                                 70
                                                       75
     2312 Cys Thr Asn Asn Thr Lys Asp Pro His Ala Thr Val Trp Ile Cys Cys
                            85
     2314 Asp Lys Gly Asn Phe Cys Ala Asn Glu Thr Ile Ile His Leu Ala Pro
                                              105
     2316 Gly Pro Gln Gln Ser Ser Thr Trp Leu Ile Leu Thr Ile Leu Ala Leu
     2317
                   115
                                         120
     2318 Leu Thr
E--> 2319
              (130)
     2466 (2) INFORMATION FOR SEQ ID NO: 47:
     2467
                (i) SEQUENCE CHARACTERISTICS:
     2468
                      (A) LENGTH: 6 amino acids
     2469
                      (B) TYPE: amino acid
     2470
                      (D) TOPOLOGY: linear
     2471
               (ii) MOLECULE TYPE: peptide
     2472
                (v) FRAGMENT TYPE: internal
     2473
               (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 47:
  -> 2474 Xaa Pro Val Art Trp
     2475
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VERIFICATION SUMMARY

PATENT APPLICATION: US/09/903,068B TIME:

DATE: 04/12/2004 TIME: 12:58:03

Input Set : A:\pto.ln.txt

Output Set: N:\CRF4\04122004\1903068B.raw

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 L:32 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
 L:35 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:35 M:238 W: Alpha Fields not Ordered, Reordered [(A) APPLICATION NUMBER:] of (1)(vi)
L:36 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:88 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:284 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:493 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:712 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:912 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:1112 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:1306 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:1511 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:1709 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:1903 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:1916 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:1929 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:1942 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:1955 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:1968 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:1981 M:220 C: Keyword misspelled or invalid format, [(iv) ANTI-SENSE:]
L:1994 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0
L:2319 M:203 E: No. of Seq. differs, LENGTH:Input:178 Found:130 SEQ:34
L:2354 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:0
L:2366 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:0
L:2378 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:0
L:2390 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:0
L:2402 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:0
L:2414 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:0
L:2426 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:0
L:2438 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44 after pos.:0
L:2450 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:0
L:2450 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 after pos.:0
L:2474 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:0
L:2474 M:330 E: (2) Invalid Amino Acid Designator, 1
L:2486 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:0
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